Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

<u>**Listing of Claims:**</u>

1. (Currently Amended) A scanning device adapted to scan an interface surface provided on a product item, the interface surface having disposed thereon coded data <u>potions at a plurality of locations on the interface surface, each coded data portion containing coded data</u> indicative of an identity of the product item<u>, an identity of the interface surface and the position of the coded data portion,</u> ~~the product item being provided in a sensing region~~, the scanning device including:

(a)   a beam generator for emitting at least one beam;

(b)   first and second acousto-optic deflectors for deflecting the beam in first and second orthogonal directions to thereby generate a raster scan pattern over a scanning patch;

(c)   a sensor for sensing at least some of the coded data on the interface surface of the product item as the product item passes through the ~~sensing region~~<u>scanning patch</u>; and

(d)   a processor for<u>:</u>

_____determining, using at least some of the sensed coded data, product identity data indicative of the identity of the product item<u>;</u>

_____<u>determining the identity of the interface surface;</u>

_____<u>determining position data representing at least one of:</u>

         <u>(i) a position of the sensed coded data portion on the interface surface;</u> <u>and,</u>

         <u>(ii) a position of the scanning patch relative to the interface surface;</u>

_____<u>determining a description of the interface surface using the determined identity;</u> <u>and</u>

_____<u>identifying the at least one region from the description and the position data.</u>

2. (Currently Amended) The scanning device of claim 1, wherein the scanning device includes at least one beam controller for selectively providing the scanning patch at one of a number of positions in ~~the~~<u>a</u> sensing region.

3. (Currently Amended)   The scanning device of claim 1, wherein the scanning device includes at least one beam controller for directing the at least one ~~scanning~~ beam along at least a selected one of a number of patch beam paths ~~into the sensing region~~.

4. (Currently Amended)   The scanning device of claim 3, wherein each patch beam path extends into ~~the~~ a sensing region at a respective angle.

5. (Original)   The scanning device of claim 4, wherein the angle between respective patch beam paths is at least one of:

  (a)   at least 1°;

  (b)   at least 10°;

  (c)   at least 30°;

  (d)   at least 45°;and,

  (e)   at least 90°.

6. (Currently Amended)   The scanning device of claim 3, wherein the beam controller includes at least one mirror for directing the ~~scanning~~ beam along ~~a~~ the selected one of the patch beam paths.

7. (Currently Amended)   The scanning device of claim 6, wherein the beam controller comprises:

  (a)   a first mirror;

  (b)   a plurality of second mirrors provided in the at least one housing; and,

  (c)   a controller which controls the position of the first mirror to thereby reflect the ~~scanning~~ beam from a selected one of the second mirrors into ~~the~~ a sensing region.

8. (Currently Amended)   The scanning device of claim 7, wherein each second mirror defines at least one patch beam path, ~~and wherein the controller controls the position~~

~~of the first mirror to thereby direct the scanning beam along a selected patch beam path~~.

9. (Original) The scanning device of claim 3, wherein the sensor is adapted to sense radiation reflected from the product item along the selected patch beam path.

10. (Currently Amended) The scanning device of claim 1, wherein the coded data encodes an (Electronic Product Code) EPC associated with the product item, and wherein the processor determines the EPC.

11. (Original) The scanning device of claim 1, wherein the product identity data distinguishes the product item from every other product item.

12-14. (Canceled)

15. (Currently Amended) The scanning device of claim 1, wherein the processor is further configured to perform the steps of:

~~(a)   compares~~ comparing the determined product identity data to previously determined product identity data; and,

~~(b)   generates~~ generating scan data representing the identity of the product item if the determined product identity data has not ~~been~~ previously been determined.

16. (Currently Amended) The scanning device of claim 1, wherein the coded data is redundantly encoded and the processor is further adapted to use the redundantly encoded coded data to detect one or more errors in the coded data.

17-19. (Canceled)

20. (Currently Amended) The scanning device of claim 1, wherein the coded data is indicative of a plurality of reference points, each reference point corresponds to a

respective location on the interface surface, and wherein the processor further generates position data representing the position of a sensed reference point on the interface surface.

21-34. (Canceled)

35. (Currently Amended) The scanning device of claim 1, the coded data being disposed on the interface surface~~or in a substrate~~ in accordance with at least one layout, the layout having at least order n rotational symmetry, where n is at least two, the layout including n identical sub-layouts rotated 1/n revolutions apart about a centre of rotational symmetry of the layout, the coded data disposed in accordance with each sub-layout including rotation-indicating data that distinguishes the rotation of that sub-layout from the rotation of at least one other sub-layout within the layout.

36. (Original) The scanning device of claim 35, wherein the rotation-indicating data of each sub-layout is adapted to distinguish the rotation of the sub-layout from the rotation of each other sub-layout.

37. (Currently Amended) ~~he~~ The scanning device of claim 35, ~~wherein the coded data includes at a plurality of locations on the interface surface, a corresponding plurality of coded data portions, and~~ wherein each coded data portion has a plurality of codewords arranged in accordance with a respective layout, the plurality of codewords being indicative of the identity of the product item.

38. (Original) The scanning device of claim 37, wherein each sub-layout has at least one codeword that is different to the codeword of each other sub-layout.

39. (Original) The scanning device of claim 37, wherein each layout has at least one codeword that is different to at least one codeword of at least one other layout.

40. (Original) The scanning device of claim 37, wherein each layout has at least

one codeword that is identical to at least one codeword of at least one other layout.

41. (Original) The scanning device of claim 37, wherein each codeword is formed from a number of data elements arranged in accordance with a respective sub-layout.

42. (Original) The scanning device of claim 41, wherein the data elements are arranged such that each data element has a unique position.

43. (Original) The scanning device of claim 42, wherein the positions of the data elements of respective sub-layouts are interleaved.

44. (Currently Amended) The scanning device of claim 1, the coded data being disposed on the interface surfaceor in a substrate in accordance with at least one layout, the layout having at least order n rotational symmetry, where n is at least two, the layout encoding orientation-indicating data comprising a sequence of an integer multiple m of n symbols, where m is one or more, each encoded symbol being distributed at n locations about a centre of rotational symmetry of the layout such that decoding the symbols at each of the n orientations of the layout produces n representations of the orientation-indicating data, each representation comprising a different cyclic shift of the orientation-indicating data and being indicative of the degree of rotation of the layout.

45. (Currently Amended) The scanning device of claim 44, wherein the coded data includes at a plurality of locations on the interface surface, a corresponding plurality of coded data portions, and wherein each coded data portion has a plurality of codewords arranged in accordance with a respective layout, the plurality of codewords being indicative of the identity of the product item.

46. (Original) The scanning device of claim 45, wherein the coded data includes a plurality of layouts of two or more layout types, each layout encoding its layout type

47. (Original) The scanning device of claim 46, wherein each layout encodes a distributed codeword wherein fragments of the distributed codeword are distributed between the two or more layout types in a predetermined manner such that the distributed codeword can be reconstructed from fragments located in a plurality of adjacent layouts of different types

48-66. (Canceled)